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EXAMINER

SHAPIRO, LEONID

ART UNIT

PAPER NUMBER

2673

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7

Please find below and/or attached an Office communication concerning this application or proceeding.

10

Office Action Summary

Application No.

09/773,453

Applicant(s)

SANGIOVANNI, JOHN

Examiner

Leonid Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17 and 20-26 is/are rejected.
- 7) ☒ Claim(s) 16, 18, 19 and 27-35 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: .

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Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show item 504 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

On page 11, Line 29 Figure 5B mentioned. Need to be changed to Figure 5.

Appropriate correction is required.

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-7, 20, 22-23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerpheide (US Patent 6,473,069 B1) in view of Davidson (US Patent No. 5,627,567).

As to claim 1, Gerpheide teaches computing system having a user interface, a user input device for inputting information into a computing system (See Fig. 3, items 16, 36, 38, in description See Col. 7, Lines 24-33), the user input device comprising: a tactile surface divided by a plurality of sections, each section being tactilely distinguished from an adjacent section (See Figs. 4D, 5A, 5C, items 78, 82, 84, 90, 92, in description See Col. 8, Lines 26-49).

Gerpheide does not show a plurality of input sensing devices detecting an input stroke defining a user request and transmitting a selection signal indicative of user request to the computing system, each section having at least one input sensing device whereby information is input into a computing system in response to reception of the selected signal.

Davidson teaches to select a desired active control function by a touching a probe to the user interface panel in location corresponding to a touch zone defined for the active control key that indicates the desired control function (Fig. 1, items 1-2, In description See Col. 3, Lines 14-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Davidson approach in the Gerpheide apparatus to transmit a selection signal indicative of user request to the computing system, each section having at least one input sensing device whereby information is input into a computing system in response to reception of the selected signal in order to select a desired active control function by touching the user interface

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panel in a location corresponding to a touch zone defined for the active control key that indicates the desired active control function (See col. 2, Lines 8-13 in the Davidson reference).

As to claim 20, Gerpheide teaches computing system having a user interface having a user input device having a tactile surface (See Fig. 3, items 16, 36, 38, in description See Col. 7, Lines 24-33), a method for inputting control and text commands into the computing system, the method comprising: a tactile surface divided by a plurality of sections, each section being tactilely distinguished from an adjacent section thereby providing orientation feedback to a user selecting at least one input sensing device associated with a specific user request (See Figs. 4D, 5A, 5C, items 78, 82, 84, 90, 92, in description See Col. 8, Lines 26-49).

Gerpheide does not show a plurality of input sensing devices detecting an input stroke defining a user request and transmitting a selection signal indicative of user request to the computing system, initializing the plurality of input sensing devices such that each input sensing device is associated with a task to be performed in the computing system.

Davidson teaches to select a desired active control function by a touching a probe to the user interface panel in location corresponding to a touch zone defined for the active control key that indicates the desired control function (Fig. 1, items 1-2, In description See Col. 3, Lines 14-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Davidson approach in the Gerpheide method of detecting an input stroke defining a user request and transmitting a selection signal indicative of user request to the computing system, initializing the plurality of input sensing devices such that each input sensing device is associated with a task to be performed in the computing system in order to select a desired active

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control function by touching the user interface panel in a location corresponding to a touch zone defined for the active control key that indicates the desired active control function (See col. 2, Lines 8-13 in the Davidson reference).

As to claims 2, 4, 22-23, Davidson teaches each sensing device and method is associated with an information element associated with a task to be performed in the computing system or activates an application installed on the computing system (Fig. 1, items 1-2, In description See Col. 3, Lines 14-36).

As to claims 5-7, 25 Gerpheide teaches the application activates from group consisting of a desktop environment, an operating system, and a control of an application program by emulating mouse (See Fig. 4D, items 78, 84, 86, in description See Col. 8, Lines 26-30).

5. Claims 3, 8-9, 11-17, 21, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerpheide, and Davidson in view of Perlin (US Patent no. 6,031,525).

As to claims 3, 21 Gerpheide and Davidson do not show the text input into an application installed on the computing system.

Perlin teaches the text input into an application installed on the computing system (See Fig. 1a, items 12, 14, 16, in description See Col. 2, Lines 1-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the text input into an application installed on the computing system as shown by Perlin in the Gerpheide and Davidson apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 8, 24 Gerpheide teaches at least one input sensing device is associated with an application selection information element associated with the task of activating an application installed on the computing system and at least one input sensing device is associated with an application operation information element associated with the task of providing control over of an application installed on the computing system by emulating mouse (See Fig. 4D, items 78, 84, 86, in description See Col. 8, Lines 26-30).

Gerpheide and Davidson do not show at least one input sensing device associated with a text input information element associated with the task of textual and character input into an application installed on the computing system.

Perlin teaches the text input into an application installed on the computing system (See Fig. 1a, items 12, 14, 16, in description See Col. 2, Lines 1-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the text input into an application installed on the computing system as shown by Perlin in the Gerpheide and Davidson apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 9, Gerpheide teaches outer circumferential portion forming a single section whereby the input stroke contacts at least one section to request performance of a particular task (See Fig. 4D, item 86, in description See Col. 8, Lines 26-30).

Gerpheide and Davidson do not show a central portion forming a single section; and a petals portion having a plurality of petals angularly dividing the tactile surface between the central portion to an outer circumferential portion of the tactile surface, each petal forming a single section.

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Perlin teaches show a central portion forming a single section; and a petals portion having a plurality of petals angularly dividing the tactile surface, each petal forming a single section (See Figs. 2-7, items 18, 20, in description See Col. 2, Lines 1-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a central portion and petals as shown by Perlin in the Gerpheide and Davidson apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 11, Gerpheide teaches a touchpad having a tactile pattern providing orientation feedback to a user selecting specific user request (See Fig. 4D, item 86, in description See Col. 8, Lines 26-30).

As to claim 12, Davidson teaches each input sensing device is a button detecting the input stroke (See Fig. 1, items 1-2, in description See Col. 3, Lines 22-37).

As to claim 13, Gerpheide teaches computing system having a user interface, a user input device for inputting control and text commands into a computing system (See Fig. 3, items 16, 36, 38, in description See Col. 7, Lines 24-33), the user interface selection device comprising: a tactile pattern providing orientation feedback to a user selecting a specific user request (See Figs. 4D, 5A, 5C, items 78, 82, 84, 90, 92, in description See Col. 8, Lines 26-49); an outer portion separating an outer boundary of the tactile touchpad from the plurality of sectors, the outer portion being tactilely distinguished from the plurality of sectors and forming a single section (See Fig. 4D, item 86, in description See Col. 8, Lines 26-30)

Gerpheide does not show a plurality of input sensing devices, each section having at least one input sensing device detecting all or a portion of an input stroke defining a control or text

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command and transmitting a selection signal indicative of the control or text command to the computing system.

Davidson teaches to select a desired active control function by a touching a probe to the user interface panel in location corresponding to a touch zone defined for the active control key that indicates the desired control function (Fig. 1, items 1-2, In description See Col. 3, Lines 14-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Davidson approach in the Gerpheide apparatus to transmit a selection signal indicative of user request to the computing system, each section having at least one input sensing device whereby information is input into a computing system in response to reception of the selected signal in order to select a desired active control function by touching the user interface panel in a location corresponding to a touch zone defined for the active control key that indicates the desired active control function (See col. 2, Lines 8-13 in the Davidson reference).

Gerpheide and Davidson do not show a central portion separating the center of the tactile touchpad from the plurality of petals, the central portion being tactilely distinguished from the plurality of petals and forming a single section; the touchpad angularly divided by a plurality of petals, each petal being tactilely distinguished from an adjacent petal and forming a single section.

Perlin teaches show a central portion forming a single section; and a petals portion having a plurality of petals angularly dividing the tactile surface, each petal forming a single section (See Figs. 2-7, items 18, 20, in description See Col. 2, Lines 1-40).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a central portion and petals as shown by Perlin in the Gerpheide and Davidson apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 14, Perlin teaches text command is selected with an out-return stroke beginning on a central portion, continuing to at least one petal, and terminating in central portion, the out-return stroke requesting textual input to the computing system (See Fig. 2. items 18,20, 22, in description See Col. 3, Lines 28-31).

As to claims 15, 17 Perlin teaches text command is selected with an out-return stroke beginning on a central portion, continuing to at least one petal, and terminating in central portion, the out-return stroke requesting textual input to the computing system (See Fig. 2. items 18,20, 22, in description See Col. 3, Lines 28-31) and Gerpheide teaches drug-out stroke (See Fig. 4A, item 66, in description See Col. 9, Lines 24-28).

6. Claims 10, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable Gerpheide, Davidson and Perlin as aforementioned in claim 9 in view Montgomery (US Patent No. 6,441,753).

As to claim 10, Gerpheide, Davidson and Perlin do not show a raised reference point tactilely identifying the central portion.

Montgomery teaches a raised central hub (See Fig. 2, item 48, in description See Col. 2, Lines 59-60 and Abstract).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a raised central portion as shown by Montgomery in the Gerpheide, Davidson and Perlin apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 26, Gerpheide, Davidson and Perlin do not show sensing contact with a button, wherein the transmitting act implemented when the button is depressed.

Montgomery teaches sensing contact with a button, wherein the transmitting act implemented when the button is depressed (See Figs. 1-2, item 4, in description See Col. 1, Lines 5-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a raised central portion as shown by Montgomery in the Gerpheide, Davidson and Perlin method in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

Allowable Subject Matter

7. Claims 16, 18-19, 27-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner's statement of reasons for allowance:

Relative to claims 16 and 18 the major difference between the teaching of the prior art of record (US Patent No. 6,473,069 B1 to Gerpheide, US Patent No. 5,627,567 to Davidson and US Patent no. 6,031, 525 to Perlin) and the instant invention is that the said prior art **does not**

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teach control command is selected with a dial stroke beginning on a petal, continuing to at least one other petal and terminating on the other petal.

Relative to claim 19 and the major difference between the teaching of the prior art of record (US Patent No. 6,473,069 B1 to Gerpheide, US Patent No. 5,627,567 to Davidson and US Patent no. 6,031, 525 to Perlin) and the instant invention is that the said prior art **does not teach** cancellation of the performance of the command identified by the input stroke.

Relative to claims 27-35 the major difference between the teaching of the prior art of record (US Patent No. 6,473,069 B1 to Gerpheide, US Patent No. 5,627,567 to Davidson and US Patent no. 6,031, 525 to Perlin) and the instant invention is that the said prior art **does not teach** the initializing act: comprising: associating each input sensing device to one of a plurality of information elements, each information element being associated with a task to be performed by the computing system.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

The Gupta (Pub.: US 2002/0003469 A1) reference discloses internet browser facility and method for the visually impaired.

The van Ketwich (US Patent No. 6,072,475) reference discloses touch screen.

The van Sokoler et al. (US Patent No. 6,320,496 B1) reference discloses systems and methods providing tactile guidance using sensory supplementation.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

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August 4, 2003


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